

Algebra: Chapter 9
Quiz Review

Name _____

Solve each equation. List all possible solutions or write "No Solution". Round answers to the nearest hundredth if necessary.

1) $3x^2 = 363$

2) $4c^2 + 14 = 78$

3) $2n^2 - 18 = 22$

4) $5Q^2 + 17 = 12$

Simplify each expression. Leave answers in radical form if necessary.

5) $\sqrt{\frac{64}{81}}$

6) $\sqrt{32}$

7) $\sqrt{\frac{45}{36}}$

8) $\sqrt{\frac{9x^2 y^5}{5x}}$

9) $4 \cdot \sqrt{6m} \cdot 6 \cdot \sqrt{4m^2}$

10) $\sqrt{18x^5 y^7}$

Tell whether each graph opens up or down and find the vertex point for each.

11) $y = 2x^2 - 4x - 1$

12) $y = \frac{-1}{2}x^2 + 4x + 8$

Opens: _____

Opens: _____

Vertex: _____

Vertex: _____

Graph each function. You must show 4 ordered pairs plus the vertex point. Label your vertex point.

13) $y = -x^2 + 4x + 1$

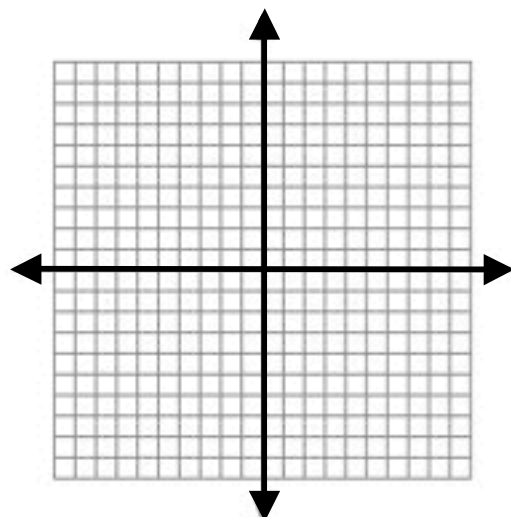
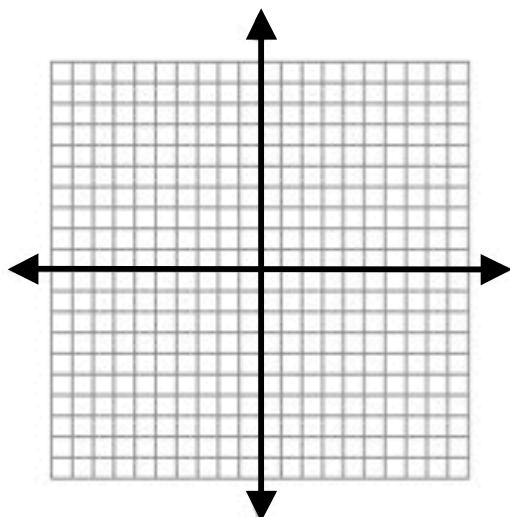
14) $y = -2x^2 + 8x - 8$

Vertex:

x	y

Vertex:

x	y



Solve each using the Quadratic Equation (Pop Goes the Weasel!).

15) $4x^2 - 13x + 3 = 0$

16) $5m - 2m^2 + 15 = 8$

17) $16 = -x^2 + 11x$

18) $c^2 - 144 = 0$

19) $-2x^2 + 6x + 1 = 0$

20) $-14x = -2x^2 + 36$